

# A MICRODISPLAY PIXEL CELL AND METHOD OF MAKING IT

## Abstract

A plurality of active areas are defined on a semiconductor substrate. Then at least one gate is formed on the semiconductor substrate to cover a portion of the active area. Thereafter a plurality of source/drain are formed in the active area not covered by the gate followed by forming a first dielectric layer on the semiconductor substrate to cover the gate and the source/drain. After that, at least one pixel cap top plate is formed atop the first dielectric layer and a capacitor dielectric layer is formed atop the surface of the top plate. Finally, at least one pixel cap bottom plate is formed atop the first dielectric layer to cover the top plate.